

# LOCAL AGENCY FORMATION COMMISSION FOR SAN BERNARDINO COUNTY

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**DATE:** JULY 8, 2013

**FROM:** KATHLEEN ROLLINGS-McDONALD, Executive Officer  
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**TO:** LOCAL AGENCY FORMATION COMMISSION

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**SUBJECT:** Agenda Item #10: Service Review for the Remainder of the South Desert Communities

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**INITIATED BY:**

San Bernardino Local Agency Formation Commission

**RECOMMENDATION:**

Staff recommends the Commission receive and file the service review for the remainder of the unincorporated South Desert communities that are identified in this report.

## **INTRODUCTION**

San Bernardino LAFCO has chosen to undertake its service reviews on a regional basis. The Commission has divided the county into four separate regions, with the South Desert Region generally encompassing the Morongo Basin, the Colorado River communities, Baker, and everything in between.

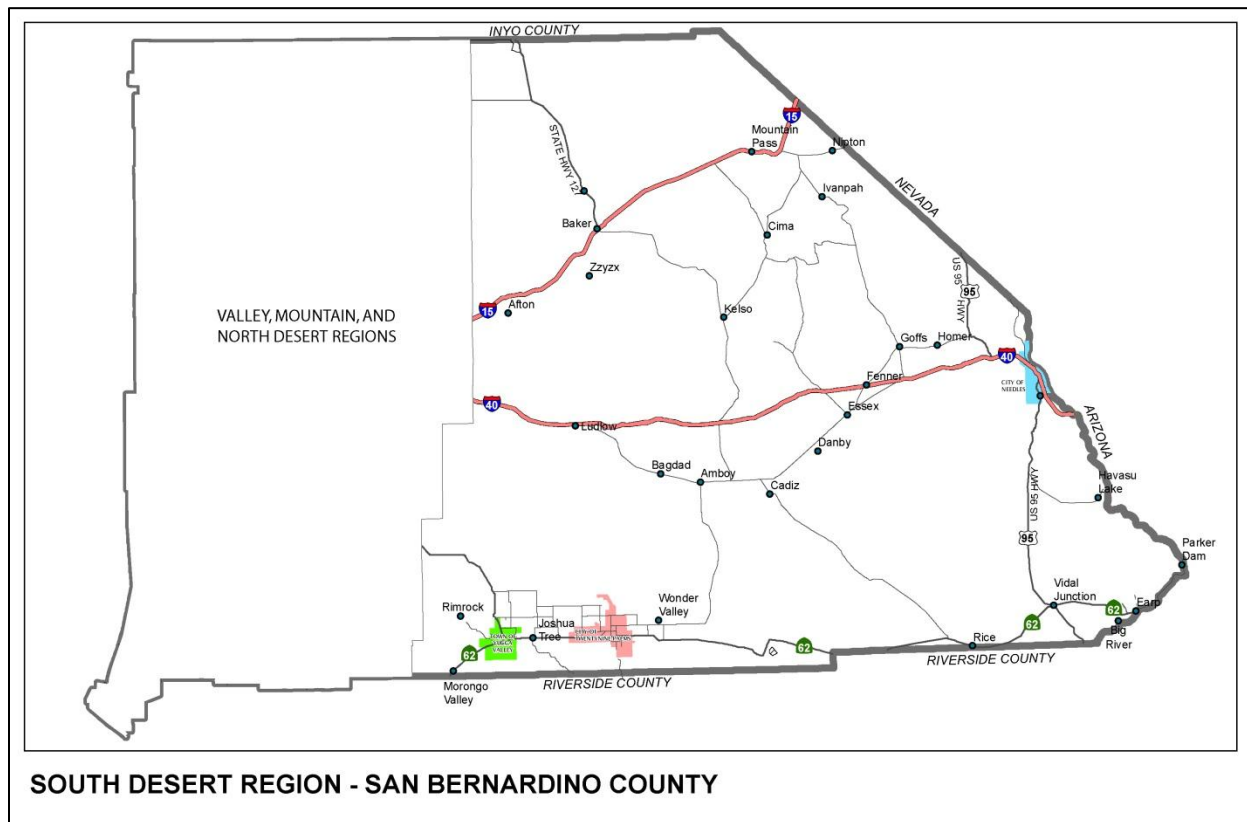
This report covers the remainder of the South Desert region that has not been covered in previous service reviews. Most of the areas that are identified in this report are small communities that have little or no access to services, nor are they within the boundaries of a special district for which the Commission establishes a sphere of influence. However, a service review is provided to identify and provide information on the services delivered, or lack of services, within these community pockets that exist in the South Desert region.

This report is organized as follows:

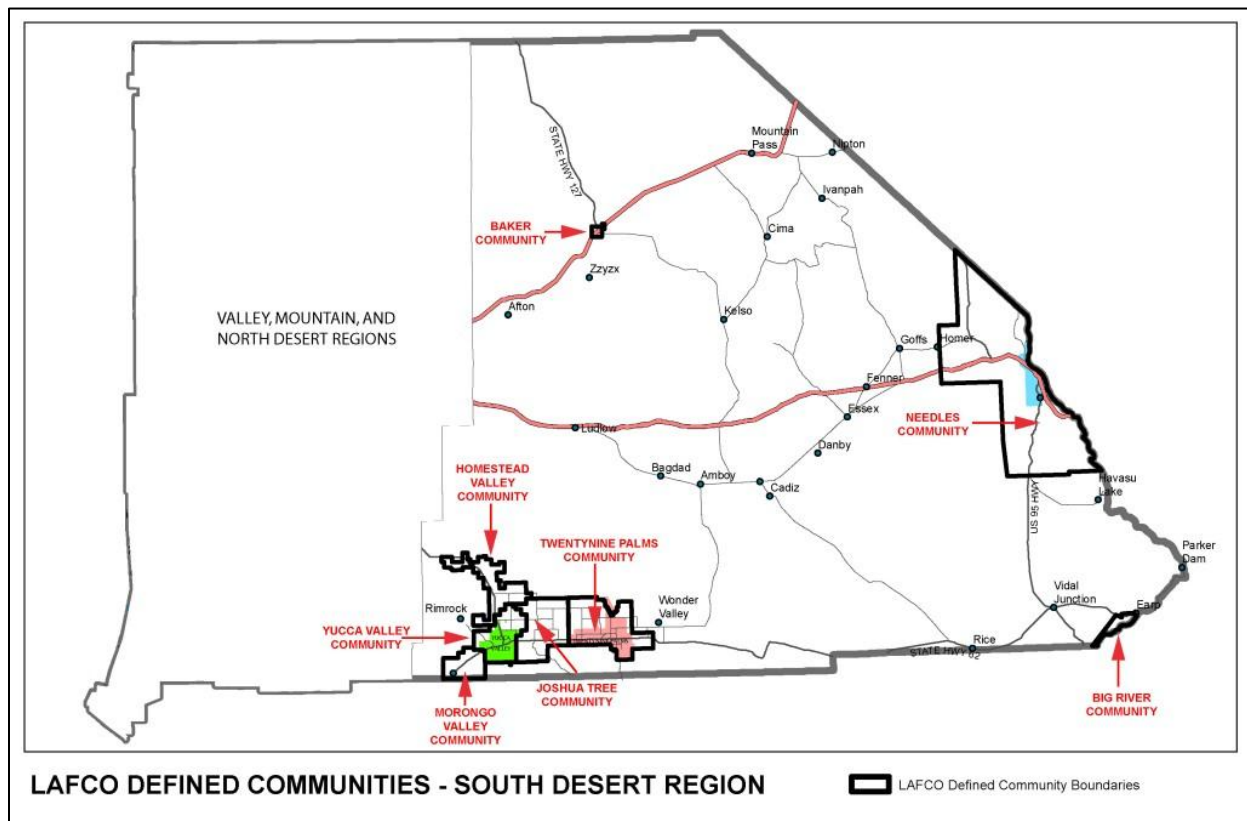
- Location and Description
  - Towns along Interstate 15 and within the Mojave National Preserve
  - Towns along Interstate 40
  - Towns along Highway 62
- History of currently active and historical areas
  - Towns along Interstate 15 and within the Mojave National Preserve
  - Towns along Interstate 40
  - Towns along Highway 62
- Review of Regional and Community Services

## **LOCATION AND DESCRIPTION**

In general, communities in the South Desert region lie along one of three major travel corridors: Interstate 15 (en route to/from Las Vegas), Interstate 40 (paralleling or overlaying the historic Route 66), and Highway 62 (Twentynine Palms Highway), with a few exceptions.



Below is a map that illustrates the LAFCO defined communities in the South Desert region (Baker, Needles, Morongo Valley, Yucca Valley, Homestead Valley, Joshua Tree, Twentynine Palms, and Big River), additional communities that have been included in previous LAFCO service reviews (Havasas Lake and Wonder Valley), and the general location of the other communities identified in this report, a copy of which is included as part of Attachment #1.



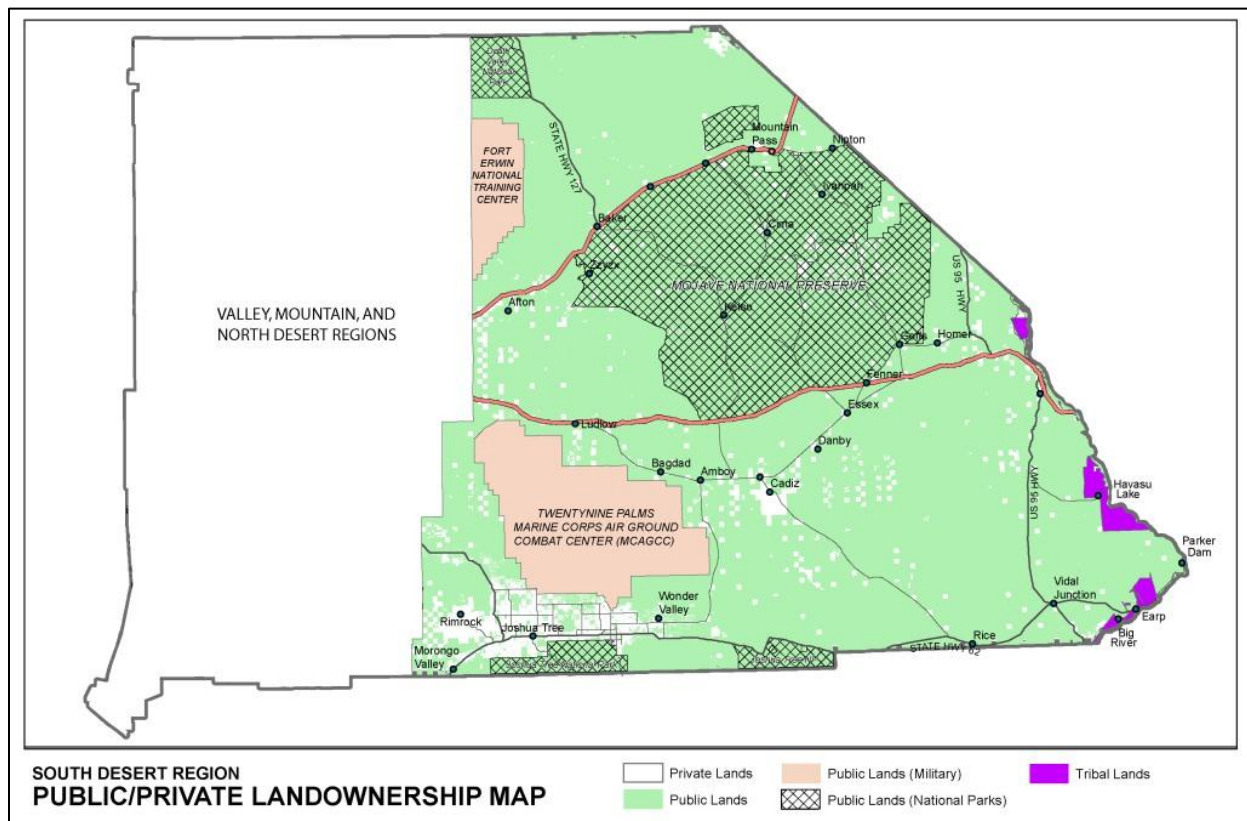
San Bernardino County is the largest county in the contiguous United States, and the South Desert region comprises roughly 60% of the county land area. Therefore, to state the obvious, this is one large area. Without knowledge of the landscape one would think that this southern California region would be ripe for development. However, this is not the case. The South Desert region is primarily desert area the majority of which is within the Mojave Desert and a portion within the Sonoran Desert (along the southern Colorado River area).

As for landownership, this region of the county includes:

- All of the Marine Air Ground Task Force Training Command in Twentynine Palms and the Mojave National Preserve;
- Portions of Death Valley National Park, Fort Irwin Military Reservation, and Joshua Tree National Park;

- Outside of the areas listed above, the largest landowner by far is the United States (with the Bureau of Land Management as manager of numerous recreational and wilderness areas).

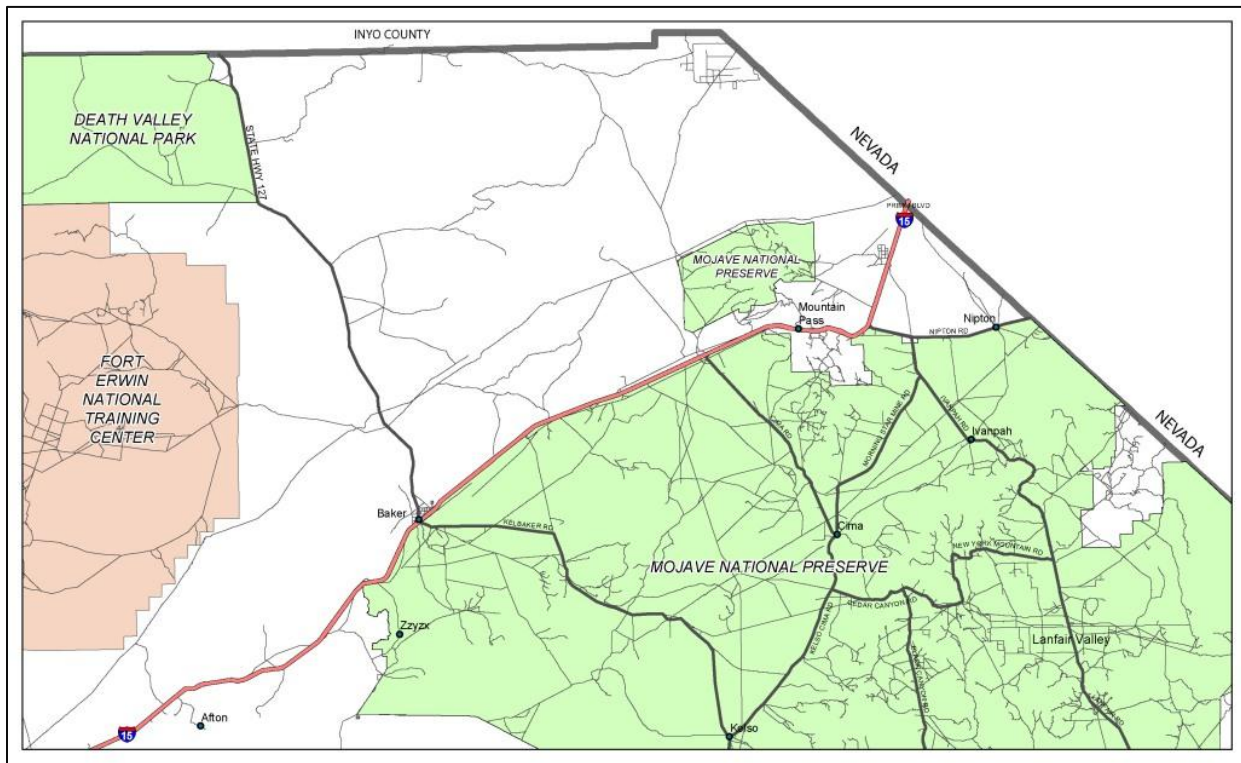
Therefore, the desert landscape coupled with the lack of private land ownership does not provide for large scale habitation. The map below shows that very little developable lands exist within this region.



## **HISTORY**

### **Interstate 15 and Mojave National Preserve Towns**

At the junction of Interstate 15 and Highway 127, Baker is the only LAFCO defined community. There are numerous towns within this region of the County that are shells of their former being. The other areas within this region of the County include Ivanpah, Nipton, Mountain Pass, Lanfair Valley, and Cima.



### **Ivanpah**

Ivanpah is a populated place in the Mojave National Preserve. There are several residences in the area, but no real association. Ivanpah is located on the bajada (a series of coalescing alluvial fans) below the northeast side of the New York Mountains overlooking the broad Ivanpah Valley. Ivanpah is located at the crossing of Ivanpah Road and the Union Pacific Railroad, which was the Los Angeles & Pacific Railroad until 1921 when it was bought out by Union Pacific. The original name for this crossing was Leastalk. The California and Eastern Railroad crossed the LA&SL railroad at this location. The California and Eastern abandoned operations in 1911, with the tracks being pulled up some time later.

This area is not to be confused with the short-lived mining town located to the north (sometimes referred to as Ivanpah I). It was founded in 1869 and existed until the mid-1880s.

## **Nipton**

Nipton is on the northern edge of Mojave National Preserve, west of Searchlight, Nevada. It has a population of 60 people. Nipton was originally founded in 1900, as a place for gold miners to reside. Currently, Nipton contains a five-room motel, originally constructed in 1910, a trailer park, a small general store, and a café that is open on most days. In June 2010, Nipton unveiled a sun-powered generator that is expected to provide about 85 percent of the town's electricity. The 80-kilowatt project is part of the one-time mining camp's plan to become an eco-tourism mecca.

## **Mountain Pass**

Mountain Pass is situated along Interstate 15 approximately 15 miles from the Nevada border at an elevation of 4,730 feet - the highest point along I-15 between California and Nevada. It has a population of 30. The most prominent feature of the town, and its reason for existence, is the Mountain Pass rare earth mine, an open pit mine for rare earth elements.

The Mountain Pass deposit was discovered by a uranium prospector in 1949, who noticed the anomalously high radioactivity. The Molybdenum Corporation of America bought the mining claims, and small-scale production began in 1952. Production expanded greatly in the 1960s, to supply demand for europium used in color television screens. The deposit was mined in a larger scale between 1965 and 1995. In 1998, chemical processing at the mine was stopped after a series of wastewater leaks. Hundreds of thousands of gallons of water carrying radioactive waste spilled into and around Ivanpah Dry Lake. The mine closed in 2002, in response to both environmental restrictions and lower prices for rare earth elements. The mine and its associated processing facilities, which are owned by Molycorp Minerals, experienced a resurgence due to expansion and modernization resuming full production in 2012.

## **Lanfair Valley**

Lanfair Valley is located in the Mojave Desert near the Nevada state line. It is bounded on the north by the New York Mountains and Castle Mountains, on the east by the Piute Range, and on the south by the Woods Mountains and Vontrigger Hills. Joshua Trees can be found in most of the valley. Elevation is 4,045 feet. The valley is home to the Lanfair ghost town at the intersection of Cedar Canyon Road and Lanfair Road. While once thriving, all that is now left of the town of Lanfair is rubble. Both Lanfair Valley, and its ghost town, are named for Ernest L. Lanfair, a settlement owner. Tens of thousands of acres in the valley are privately held, despite being located in the Mojave National Preserve. Few people live in the valley today, but at one time there were schools, farms, post offices, and a railroad.

## **Kelso and Cima**

Kelso and Cima are ghost towns located in the Mojave National Preserve. Kelso was named after a railroad worker who won a contest to have the town named after him. The town was built specifically as a railroad station because of its location and nearby springs that provided abundant water. Starting off as what was a simple train depot in the 1920s, the town of Kelso boomed briefly to as many as 2000 residents in the 1940s, when borax

and iron mines opened nearby. The town shrank again when the mines closed after about a decade. A significant feature within this area is the Kelso Dunes, known as the singing dunes, which cover a 45 square mile area east of Afton Canyon. Kelso Dunes is the largest field of eolian (wind shaped) sand deposits in the Mojave Desert. The region is protected by the Mojave National Preserve and is located near the Preserve Visitor Center. The dune field includes migrating dunes, vegetation-stabilized dunes, sand sheets, and sand ramps. The tallest dunes rise up to 650 feet above the surrounding terrain.

Cima lies in a mountain pass on the divide between the Ivanpah Valley and the Mojave River basin, at an elevation of 4,175 feet. Cima was founded circa 1906 and served as both a railroad siding and a commercial center for ranchers and miners. However, few people now live in the area.

Nevertheless, both towns still see considerable activity on the Union Pacific rail line that brought the towns into being. Between Kelso and Cima lies the Cima Grade, the steepest part of the line between the Los Angeles area and Las Vegas—the tracks rise 2,000 feet in 20 miles.

### **Interstate 40 (former Route 66) Towns**

At the junction of Interstate 40 and Highway 95 near the Colorado River, the City of Needles is the only LAFCO defined community. Additionally, as a part of the service reviews for the Needles community, a service review was conducted for the adjacent Havasu Lake community. This service review was provided even though there is no sphere of influence associated with the area.

The other areas within this region of the County were once-thriving towns that were displaced by the creation of Interstate 40 in 1973. These include, but are not limited to Ludlow, Bagdad, and the eight alphabetical towns. The railroad company workers were responsible for staking most of the east Mojave Desert towns. To keep track of the water sidings, the towns were named in alphabetical order as follows: Amboy, Bristol, Cadiz, Danby, Essex, Fenner, Goffs, and Homer. The alignment of the new rail tracks also brought a new cleared path highway that was to be the National Trails Highway.

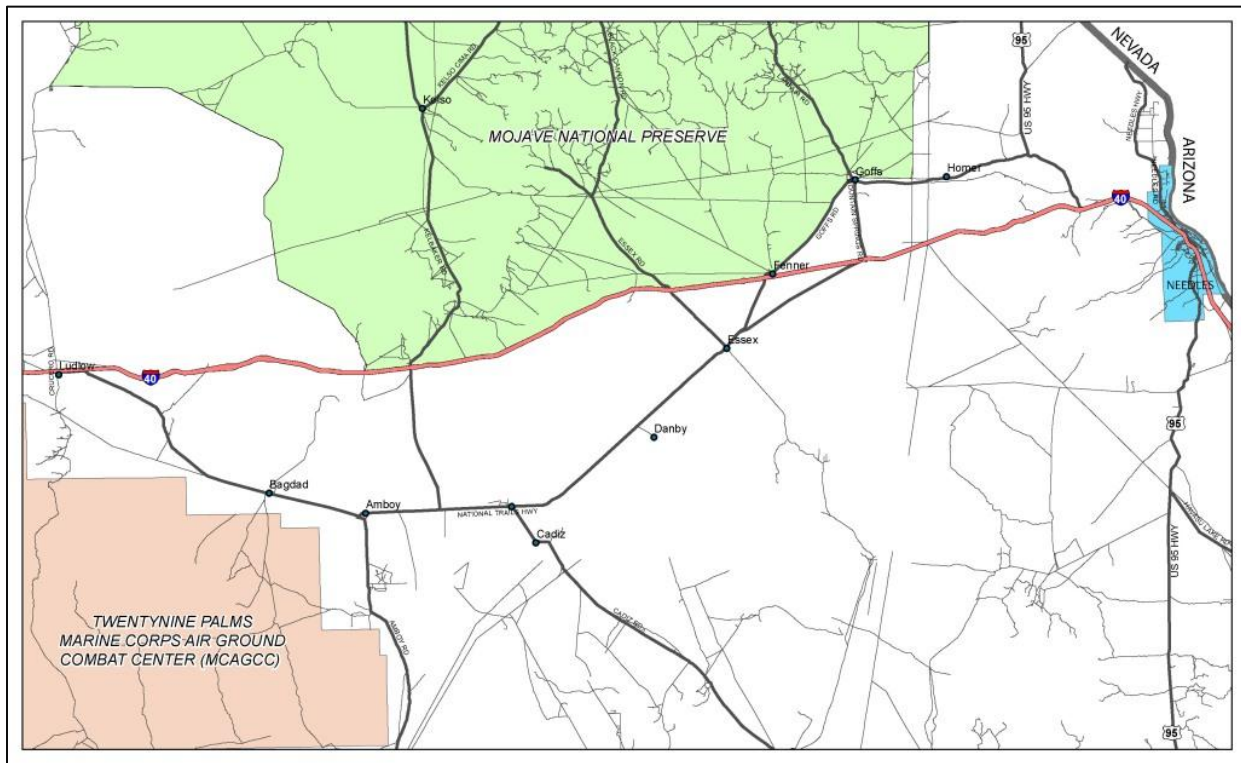
Of these towns, only Ludlow is not listed as a ghost-town and continues to provide services to the Interstate 40 travelers, although on a limited scale. In Cadiz large-scale agricultural activity takes place, and there are plans to tap the natural aquifer and send the water via pipeline to Orange County.

### **Historic U.S. Route 66**

Officially established on November 11, 1926, US Route 66 began in Chicago, Illinois and terminated in Los Angeles, California a distance of 2,448 miles. It was one of the original highways in the US highway system, and probably the most famous, known in many areas as the “Mother Road” or “Main Street of America”.

What was unique about Route 66 was that it traveled diagonally from the northern mid-west to southern California thus connecting smaller rural towns along the route. Many roadside services such as service stations and diners established their business models as a result of this road. In the early 1930s work on the road was stopped due to the great depression. During that same period thousands of people from the mid-west dust bowl region traveled to California in search of work and a better life. Work resumed on the road as part of President Roosevelt's *New Deal* using WPA resources. The entire distance of the road was paved by 1938.

After World War II, Route 66 prospered as tourism and motor commerce expanded westward. The US highway system reached its zenith in the early 1950s just before the Interstate Highway System was developed. When Interstates were completed, they often relegated the existing US route to secondary status. In the case of Route 66, several Interstate Routes – most notably I-40 in the southwest (solely I-40 in San Bernardino County) – completely bypassed it. US Route 66 was decommissioned in 1985.



## Ludlow

Ludlow started as a water stop for the Atlantic and Pacific Railroad in 1883. Ore was found in the nearby hills, leading to a boom. By the 1940s, mining had ceased and the town was left with only the tourist traffic from Route 66. When Interstate 40 was built, there was little business and the residents departed, leaving empty buildings that still stand beside old Route 66. A new small "Ludlow" just to the north at the on-off-ramps of Interstate 40 was built in the 1970s, and contains two gas stations and a small tire and repair shop, a small motel, and a restaurant and fast-food café. The Mojave National Preserve and Kelso

Dunes, of the National Park Service, is to the northeast of town. To the west is Pisgah Crater in the Lavic Lake volcanic field. The Bullion Mountains are south behind the town, with the Bristol Mountains to the east and Cady Mountains to the northwest.

## **Cadiz**

Cadiz is located just south of the Marble Mountains near National Trails Highway. Cadiz is home to a former railroad stop. It is northeast of the Sheep Hole Mountains and can be accessed by road from the historic Route 66 at Chambless. The town was named in 1883 by Lewis Kingman, a locating engineer for the Atlantic and Pacific Railroad. It is the third in a string of alphabetically named railroad stations in the Mojave Desert.

Cadiz Inc., a publicly-held land and water resource development company that owns approximately 70 square miles of property in the Cadiz area, is currently engaged in a combination of organic farming and water supply and storage projects. For over 20 years, it has developed a total of 1,920 acres of its property for agricultural operations that include grape vineyards and lemon orchards. Seasonal vegetable crops on the property are grown organically and plantings can include vegetables such as squash, asparagus, and beans.

In addition, an RV Park identified as "Bolo Station" exists within the community serving a transient population.

## **Essex**

Essex, a former oasis along historic Route 66 in California, was allegedly founded when a motorist suffered a flat tire only to discover there were no garages for miles. Essex was notable along Route 66 for providing free water to travelers, thanks to a well installed by the Automobile Club of Southern California. With an estimated population of just 89 people in 2005 (down from 111 in 2000), Essex is on the verge of becoming one of many ghost towns displaced by the creation of Interstate 40. Essex Elementary school (founded 1937), which once served the educational needs of both Essex and its neighbor Goffs, has closed. Its location is remote even with today's technological capabilities, Essex lacks many comforts of modern day life, and was unable to receive television service until the end of 1977. Many of the homes and buildings in Essex have completely disappeared. There are no facilities in town.

## **Brief History of the Remaining Areas**

These once-thriving towns have suffered the same fate - displacement by the creation of Interstate 40 in 1973. A brief history review is provided for a sample of these towns.

### **Bagdad**

The town was founded in 1883 when the Atchison, Topeka and Santa Fe Railway line between Barstow and Needles was built. Bagdad holds the record for the longest dry streak in United States history with 767 straight days without rain, from October 3, 1912 to November 8, 1914. It is to the south of the Granite Mountains and the Mojave National Preserve, and north of the Bullion Mountains. In 1883, railroad officials who dubbed two nearby settlements Siberia and Klondike named this desert town after the Iraqi capital,

omitting the "h" in a divergent spelling for the city on the Tigris. As many as 50 Chinese railroad workers died while laying tracks, falling victim to a cholera epidemic. Bagdad was an important railhead, a watering place for railroad engines during steam days and a center for nearby gold, silver, copper and lava mining camps. There were homes, hotels, saloons and stores here, a post office from 1889 to 1923, a school, a passenger railway station and a Harvey House restaurant. By the 1940s, however, all that remained was the depot, a few homes, the Bagdad Cafe, and a gas station and cabins for overnight stays on U.S. 66. It was bypassed by the opening of Interstate 40 to the north in 1973, and lost travelers business and resident population.

### Amboy

Although Amboy was first settled in 1858, the town was not established until 1883. Lewis Kingman, a locating engineer for the Atlantic and Pacific Railroad, created the town as the first of a series of alphabetical railroad stations that were to be constructed across the Mojave Desert. In 1926, Amboy became a boom town after the opening of U.S. Route 66. In 1938, Roy's Motel and Café opened, which prospered due to its isolated location on the route. By 1940, Amboy's population had increased to 65. Its growth was tied not only to tourists, but also to the Santa Fe Railroad over which high-speed freight trains still run today between Kingman, Arizona and the BNSF Railway Barstow yard. Amboy was once a major stop along famous Route 66 but has seen much lower visitation since the opening of Interstate 40 to the north in 1973. The town has a total of 10 surviving buildings. The school closed in 1999. According to the *Los Angeles Times*, the town's population in 2007 was approximately four.

Currently the town of Amboy is owned by Albert Okura, who also owns the Juan Pollo restaurant chain. Okura plans to fully restore Roy's to its former glory as a "nostalgia tourists" destination, and Route 66 rest stop for travelers en route to and from Colorado River scenic and recreation areas.

### Bristol

Bristol Lake is a dry lake located directly south of Amboy. Amboy Crater and the Bullion Mountains are to the west and Old Woman Mountains to the east. The lake is approximately 14 miles long and 12 miles at its widest point. A salt evaporator operation, currently operated by Tetra Technologies, Inc., is situated on the dry lake bed just east of Amboy Road.

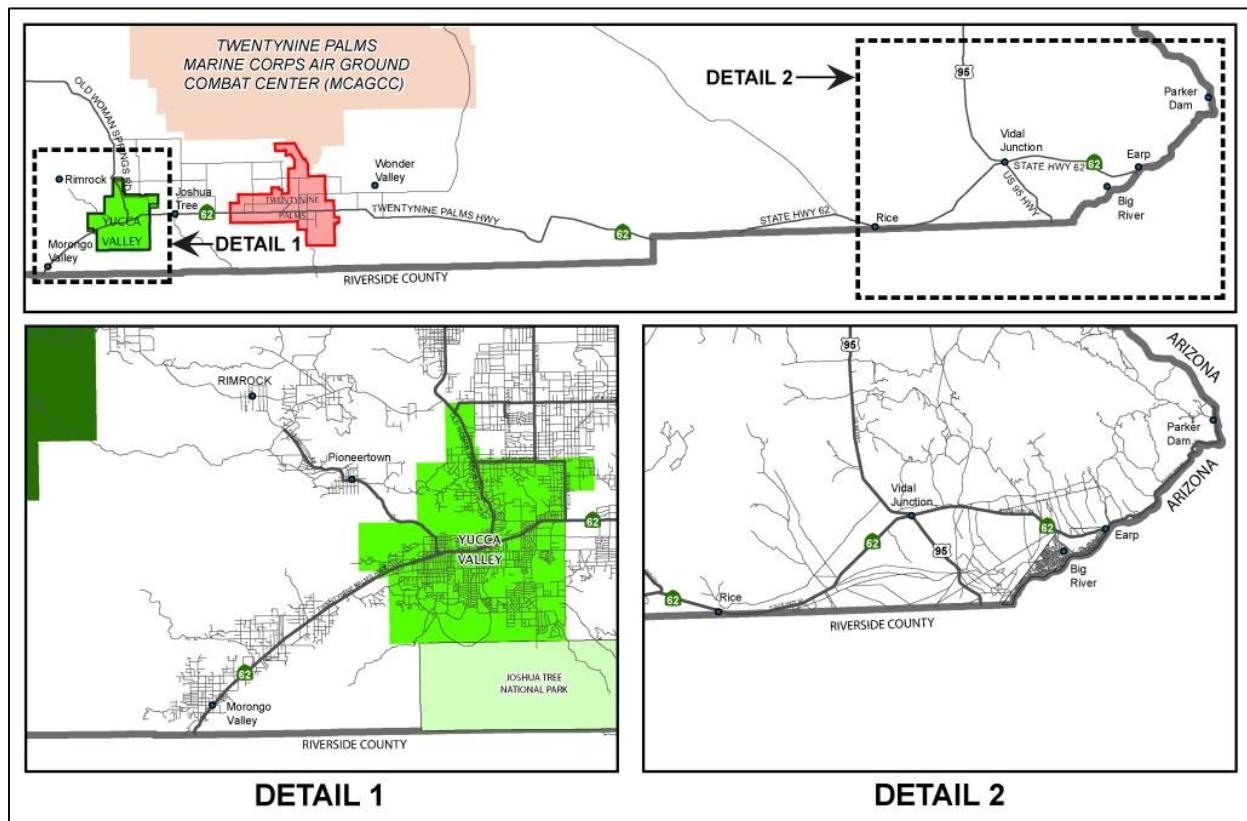
### Goffs

Originally known as Blake, Goffs is a nearly empty one-time railroad town at the railroad route's high point in the Mojave Desert. Goffs was a stop along famous U.S. Route 66 prior to 1931, when a more direct route between Needles and Amboy was built. An early 20th Century general store is the town's largest building (now abandoned). A historic schoolhouse, built in 1914 and almost totally deteriorated by the early 1980s, has since been renovated to its original plans by the Mojave Desert Heritage and Cultural Association. The schoolhouse and grounds now house a museum primarily specializing in the area's mining history.

### **Highway 62 (Twentynine Palms Highway) Towns**

Proximate to Highway 62 (Twentynine Palms Highway) there are LAFCO defined communities in the Morongo Basin (Morongo Valley, Yucca Valley, Homestead Valley, Joshua Tree, and Twentynine Palms) and along the Colorado River (Big River). Service reviews have been conducted for all the community-based agencies within these communities. Additionally, as a part of the service reviews for the Twentynine Palms community, a service review was conducted for the adjacent Wonder Valley community; although it is not a LAFCO defined community since there is no sphere of influence associated with the area.

The other areas within this region of the County include Rimrock (west of Yucca Valley), Rice (16 miles west of Vidal Junction), and Vidal Junction (at the junction of Highway 62 and Route 95). Also included are two areas along the Colorado River: Earp (where Highway 62 meets the Colorado River, across the river from Parker, AZ), and Parker Dam (access to the area is through Parker Dam Road which spurs north from Highway 62).



#### **Rimrock**

Built in 1947, Rimrock Ranch began as the first homestead in the beautiful Rimrock area above Yucca Valley and below Big Bear Lake. A few cabins sprouted up shortly after that, built to house the stars and directors of dozens of cowboy movies filming in nearby Pioneertown during the 1950s (Roy Rogers, Gene Autry and the like).

### **Rice (formerly Blythe Junction)**

The town, located on present-day California State Route 62 between Twentynine Palms and the Arizona state line, grew around a Santa Fe Railroad subdivision and siding. It was the starting point of the abandoned Ripley Branch that goes through Blythe to Ripley, California. To the east of Rice is the Rice Municipal Airport, which was acquired by the United States Army's 4th Air Support Command in 1942. Operations at Rice Army AirField were ended by August 1944, and the field was declared surplus. By 1960 the renamed Rice Airport had been abandoned. As of 2007, no standing structures remain and little evidence exists of the airport's former existence. There are no standing buildings and no residents in Rice at present. Rice became noted for its unique "Rice Shoe Tree", a lone tamarisk on a turnout just south of the highway. For reasons unknown, it became customary for travelers on Highway 62 (also known as Rice Road) to and from the Colorado River to hang an old shoe on the tree's branches.

### **Vidal Junction**

The town is near the California/Arizona state line immediately west of Parker at the junction of U.S. Route 95 and State Route 62. It consists of little more than a gas station, a trailer park, a closed diner and a California agricultural inspection station. Though not a destination in its own right, Vidal Junction is a frequently used rest area and "jumping off" point for travelers headed to the Colorado River.

### **Colorado River Areas (Earp and Parker Dam)**

Earp is named for famed Old West lawman Wyatt Earp who, with his common-law wife, Josephine Sarah Marcus, lived part-time in the area beginning in 1906. Earp staked more than 100 copper and gold mining claims near the base of the Whipple Mountains. Unofficial alternate names of the area are listed as Drenna and Drennan.

Parker Dam is a concrete arch-gravity dam that crosses the Colorado River 155 miles downstream of Hoover Dam that straddles the border between California and Arizona and approximately 85 miles downstream of Davis Dam. Built between 1934 and 1938 by the Bureau of Reclamation, it is 320 feet high, 235 feet of which are below the riverbed, making it "the deepest dam in the world". The dam's primary functions are to create a reservoir, and to generate hydroelectric power. The reservoir behind the dam is Lake Havasu and can store 647,000 acre feet.

The Parker Dam area is located along the Colorado River across from Arizona 24 miles northeast of Vidal. In 2007, San Bernardino LAFCO dissolved the Parker Dam Recreation and Park District, the only form of localized government, due to the District not having an active board of directors, no current employees, no provision of services for over two years, and a lack of financial activity in its accounts.

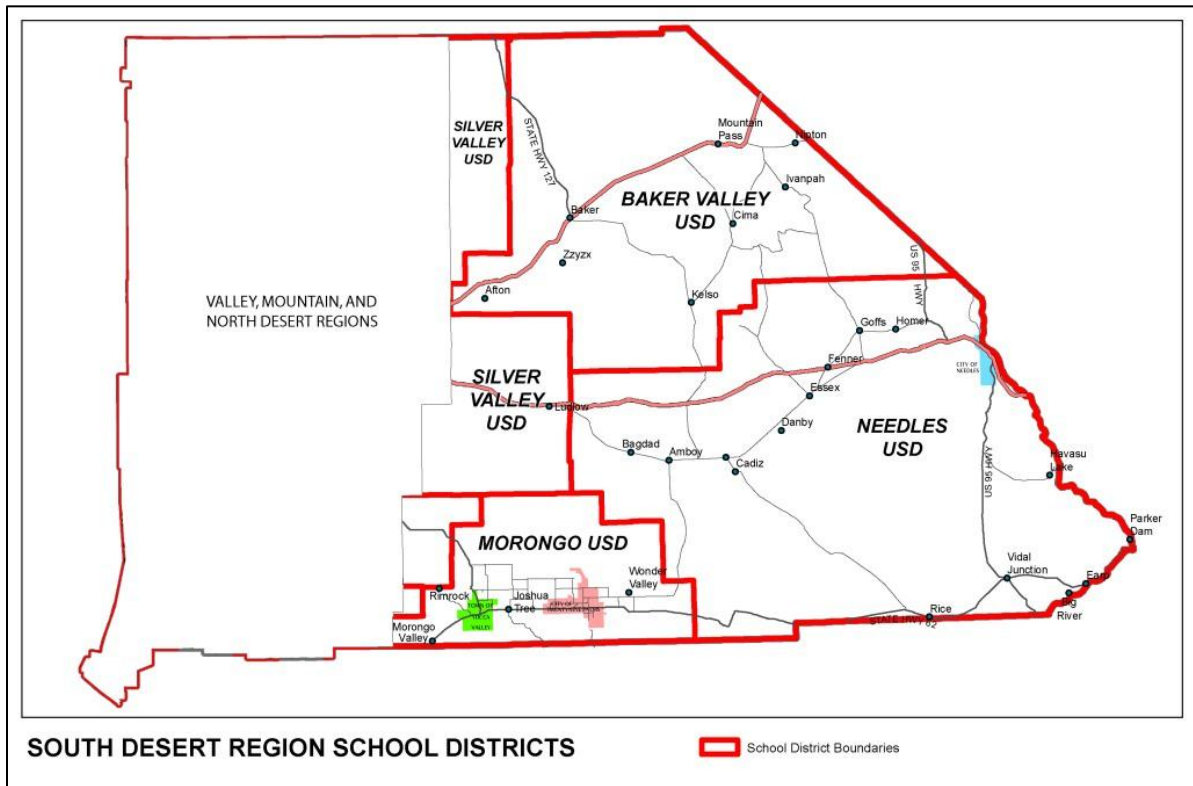
These areas along the Colorado River had a combined estimated population of 1,662 as of the 2010 Census.

## **REVIEW OF REGIONAL AND COMMUNITY SERVICES**

Some of the communities identified in this report are served by multiple public and/or private entities. The following provides a summary of the services or lack of services within these communities.

### **A. School Districts**

At the August 2010 LAFCO Workshop, the Commission directed staff to include information on the K-12 school districts as a part of the community discussion for its mandatory service reviews, to include a discussion of boundaries and shared facilities, in order to gain additional perspective on the community of interest. Below is a map that shows the different school districts that serve the communities identified in this report.



#### **Silver Valley Unified School District**

Silver Valley Unified School District covers an area of approximately 3,345 square miles, equivalent in size to the combined states of Rhode Island and Delaware. From this review, it provides educational services to Ludlow. The nearest schools are in Newberry Springs (elementary) and Daggett (high school).

### Baker Unified School District

The Baker Unified School District was established in 1977 and includes most of the Mojave National Preserve and the LAFCO defined Baker community. From this review, it provides educational services to Kelso, Cima, Ivanpah, Lanfair Valley, Nipton, and Mountain Pass. All schools are located in Baker.

### Morongo Unified School District

The Morongo Unified School District area covers the entire area known as the Morongo Basin to include the LAFCO defined communities of Morongo Valley, Yucca Valley, Homestead Valley, Joshua Tree, and Twentynine Palms, as well as Wonder Valley. From this review, it provides educational services to Rimrock. The District has eleven elementary schools, two middle schools, two comprehensive high schools, two continuation high schools, two state preschool programs, and a special education preschool program. The San Bernardino County School Superintendent provides leadership for this district.

### Needles Unified School District

The Needles Unified School District is the largest in the contiguous United States in terms of area with almost 6,000 square miles in its boundaries. In distance, this is the farthest school district from the county education offices (212 miles by freeway). The district includes the LAFCO defined communities of Big River and Needles as well as Havasu Lake area. From this review, it provides educational services to Bagdad, Amboy, Bristol, Cadiz, Danby, Essex, Fenner, Goffs, Homer, Rice, Vidal Junction, Earp, and Parker Dam. Needles Unified School District is made up of seven different site locations throughout the City of Needles as well as the outermost boundaries of the district.

## **B. Water**

Public water systems are categorized as either community or non-community systems. A community water system is a public water system that serves the same people year-round. Most residences including homes, apartments, and condominiums in cities, towns and mobile home parks are served by this type of system. A non-community water system is a public water system that serves the public but does not generally serve the same people year-round.

There are two types of non-community water systems: transient and non-transient non-community water systems. A transient non-community water system is a non-community water system that serves different people for more than six months out of the year. Rest stops, parks, convenience stores and restaurants with their own water supplies are examples of transient non-community water system. A non-transient non-community water system is a non-community water system that serves the same people more than six months per year, but not year-round. Schools, colleges, hospitals and

factories with their own water supplies are examples of non-transient non-community water system.

### **Interstate 15 and Mojave National Preserve Towns**

Service information is provided for the areas that have a public water system: Ivanpah, Nipton, and Mountain Pass.

#### **Ivanpah**

The Primm Valley Golf Club is classified as a transient, non-community water system. The system consists of five vertical wells and a storage tank. The system has one service connection and the golf course with several facilities. The system serves more than 50 employees and a transient population. All five wells are used for potable water supply and for lake fill. Water is drawn from the lake for irrigation. The system chlorinates each well with automatic chlorinators by injecting sodium hypochlorite into the discharge line. Water is conditioned for the clubhouse with a water softener and a reverse osmosis (RO) unit. Water is stored in two 300 gallon plastic tanks after it passes the RO unit. Water is re-circulated through an ultraviolet sterilizer so the water does not become stagnant.

In May 2013 the County Environmental Health Services issues a Notice of Violation to Primm Valley Gold Club for failure to monitor the water quality constituents in 2012. The Golf Club is ordered to collect one water sample for nitrate analysis on an annual basis.

#### **Nipton**

##### **Ivanpah Water and Power Company (Nipton Station)**

The system is classified as a transient, non-community water system. The system consists of a single vertical well, a 25,000 gallon gravity storage tank, two pressure tanks, and a booster pump. There is an additional 10,000 gallon steel railroad car tank for filling trucks. The system serves a RV site with 30 connections, a bed and breakfast with five rooms, a restaurant, and three residences. The system regularly serves six employees and transient population.

##### **Stateline Service Water System**

The system is classified as a transient, non-community water system. The system consists of two vertical wells and five 85 gallon pressure tanks. This system serves one mini-mart and currently five residences immediately across from the Primm Valley Resorts and Casino within Nevada. Well #1 is located near the minimart and serves the gas station/minimart. Well #2 is located across the street and serves the residences. There is one 7,500 gallon storage tank used for fire suppression. Well #1 was drilled in 1970 to a depth of 500 feet with a 50 foot seal and a yield of 30 gpm. There is no information in the County Environmental Health Services system files for Well #2. The wells each have a sample tap and both wells are more than 18 inches above finished grade.

## **Mountain Pass**

The Mountain Pass Mine (Molycorp) water system is classified as a community water system. The system consists of four vertical wells and three storage tanks. The system serves approximately 65 residents including three CHP residences and five CalTrans residences. Currently only the four Shadow Valley Wells are being used to supply the water system. The Ivanpah Valley wells are not being used at this time. Three large volume storage tanks are being used for domestic supply water. The four Shadow Valley wells simultaneously feed one lower storage tank. The water is then boosted by two pumps to the upper storage tanks located at the facility. Two upper storage tanks gravity feed the distribution system from a higher elevation. The water is mainly used for industrial purposes, and bottled water is provided for consumption. The facility also has two additional storage tanks strictly for industrial purposes and these tanks are supplied by the onsite monitoring wells. These tanks are not connected to the distribution system.

In May 2012, County Environmental Health Services issues Mountain Pass Mine a Notice of Violation for positive total coliform. Mountain Pass Mine is ordered to notify County EHS within 24 hours of positive sample tests, and written notice of the water quality violation must be provided by publication of said notice in a daily or weekly newspaper of general circulation in the area served.

## **Interstate 40 (former Route 66) Towns**

Of these towns, only Ludlow is not listed as a ghost-town and continues to provide services to the Interstate 40 travelers, although on a limited scale. In Cadiz large-scale agricultural activity takes place, and there are plans to tap the natural aquifer and send the water via pipeline to Orange County and beyond. Service information is provided for the areas that have a public water system: Ludlow, Cadiz, and Essex.

## **Ludlow**

The local water system is operated by Knoll Enterprises, Inc., and is classified as a community water system. This system consists of three active vertical wells, pressure tank, and two storage tanks. The other well is for back-up use only. All wells pump directly to the rail car storage tanks, a booster pump is then used to pressurize the pressure tank. The system has approximately 24 service connections, both residential and commercial. The system serves 22+ year round residents and a transient population. No significant changes or complaints have been reported to this department. According to the County Environmental Health Services, the system appears to be in acceptable condition. Analyses show elevated arsenic levels above the maximum contaminant level. The system uses point of use reverse osmosis filtration systems for potable water at all public places.

In January 2013, County Environmental Health Services issued a compliance order to Knoll Enterprises for failure to comply with the following:

- Maximum contaminant levels of inorganic chemicals (arsenic and fluoride).
- Maximum contaminant levels and monitoring of gross alpha particle activity.

The corrections for compliance are for the system to take quarterly samples of raw water for testing, develop and submit a plan to County EHS by December 2013 detailing how the water system plans to achieve compliance, notify all customers regarding exceedance on a quarterly basis, and achieve compliance by December 2014.

## **Cadiz**

### Cadiz, Inc.

Cadiz, Inc., a Los Angeles-based land and water-resource-management company, owns more than 35,000 acres around Cadiz. The Cadiz Valley area overlies a large aquifer and is located approximately 30 miles north of the Colorado River Aqueduct.

The Cadiz Valley Conservation, Recovery and Storage Project involves installing wells to tap the natural aquifer that lies beneath the 70 square miles of Mojave Desert land owned by Cadiz Inc. The private developer will also build a 43-mile pipeline from its eastern San Bernardino County property along railroad right-of-way to the Colorado River Aqueduct, which supplies water to residents in Orange County and beyond.

### Cadiz Inc. Labor Camp

This system is classified as a transient non-community water system. The system consists of a single vertical well, two 3,800 gallon polyethylene storage tanks, and two booster pumps. The well was constructed in 1986 to a depth of 403 feet with a sanitary seal. This system is equipped with an automatic chlorinator at the wellhead. This system serves a labor camp for a transient population of farm laborers with 12 trailers and a kitchen. This water system permit was deactivated in 2008, and the permit was reactivated in May 2012 because they resumed operation and the facility operates a kitchen for the farm laborer. The California Code requires potable water supply for a health permit.

In March 2013, County EHS issued a Notice of Violation to Cadiz Inc. Labor Camp for failure to comply with the following:

- Routine sampling for total coliform bacteria.
- Monitoring and compliance for nitrate and nitrite.

The corrections for compliance are for the system to: 1) take a minimum of one total coliform sample per quarter, and maintain and operate the system in such a manner as to preclude contamination of the system by total coliform bacteria, and 2) submit nitrate and nitrite results to County EHS and continue to analyze the water for nitrate on an annual basis and nitrite once every three years.

### Bolo Station RV Park

This water system is classified as a transient non-community water system. The system consists of a single vertical well, three 2,600 gallon polyethylene storage tanks, one booster pump, and a hydropneumatic tank. A community-grade well was drilled in 2006 to a depth of 400 feet. The well is surfaced sealed and has a sanitary seal and pumps to all storage tanks. Booster pump draws water from tank 1 and maintains system pressure between 40-50 psi. Tanks 2 and 3 are filled, but are not currently used to supply water. According to County EHS, the operator plans to add a booster pump and a hydropneumatic tank for each storage tank as demand increases. The water system supplies water to a snack bar and a 27 space RV park. The system has 12 service connections with six currently in use.

### **Essex**

#### Water Service

The Hi Sahara Oasis water system is classified as a transient non-community water system. The system consists of a single vertical well and a 500 gallon pressure tank. The well pumps directly to the pressure tank. There are two 8,000 gallon fiberglass tanks for emergency/fire purposes. Both tanks are valved and isolated from the system. The system has four service connections, three mobile homes and the market/gas station with a restaurant. The system services eight employees and a transient population.

### **Highway 62 (Twentynine Palms Highway) Towns**

Service information is provided for the areas that have a public water system: Vidal Junction, Earp, and Parker Dam.

#### **Vidal Junction**

The Vidal Junction Water System is classified as a transient non-community water system. The well was drilled in 1933 to a depth of 700 feet with a 60 foot sanitary seal. The system consists of a single vertical well, steel bolted gravity storage tank, booster pump, two pressure tanks, and an automatic chlorinator. The well pumps directly to the storage tank. The system has several service connections, a gas station, restaurant, RV park, and a motel. Only the gas station is open for business at this time.

#### **Colorado River Areas (Earp and Parker Dam)**

#### Emerald Cove

The Emerald Cove water system is classified as a transient non-community water system. The system consists of a vertical well and a pressure tank. The 5,000 gallon pressure tank provides both storage and pressure to the system. The well was drilled in

1983 to a depth of 150 feet with a 50 foot cement seal and a yield of 150 gpm. The system serves the RV park with 860 RV sites, offices, clubhouse, 20 employees, and a transient population of more than 1,000 per month. The park is located on BLM land, which limits the residency time to five months per year. The only permanent residents are the park managers.

#### Big Bend Resort

This water system is classified as a transient non-community water system. The water source of the system is the Colorado River. The system consists of a 7.5 hp intake pump, 10,000 gallon fiber glass storage tank, eight bladder tanks, booster pump, and a pressure sand filter. The water system serves more than 97 mobile homes and 130 RV spaces. The park is located on BLM land, and residency time is limited to a maximum of five months per year. The only permanent residents are the park managers/caretakers.

#### Echo Lodge Resort

This water system is classified as a transient non-community water system. The system consists of a single vertical well and six bladder tanks. The well was drilled in 1996 to a depth of 150 feet with a 50 foot grout seal and a yield of 200 gpm. The well and the tanks are located in a locked enclosure. The well has a meter and is more than 18 inches above finished grade. The system has one service connection, the RV park with 200 mobile home sites, and 100 RV spaces. The system serves a transient population of more than 1,000 per month. The park is located on BLM land, which limits the residency time to five months per year. The only permanent residents are the park managers.

#### Empire Landing Campground

This water system is classified as a transient non-community water system. The system serves a RV park with 50 spaces and a tent camping site. The system consists of a water treatment system and a gravity storage tank. The source of water is Colorado River. The RV park has a vertical well and a pressure tank for irrigation on a separate distribution system.

#### Parker Dam Power Plant, Bureau of Reclamation

This water system is classified as a non-transient non-community water system. The source of water is Colorado River. The system consists of four pairs (roughing and polishing) of pressure sand filters, automatic chlorinator, two booster pumps, and a concrete storage tank. The storage tank gravity feeds the distribution system. The system supplies water to Power Plant, Fish and Wildlife campground, Sheriff's Station, Bureau of Water Operations and the Post Office.

#### Rio Del Colorado

This water system is classified as a transient non-community water system. The system consists of two vertical wells, two gravity storage tanks, eight pressure/bladder tanks, and three booster pumps. Two of the booster pumps are used to maintain pressure at

the park, and the third booster pump is used for fire suppression. Both wells are connected to two sand filters prior to the storage tank. The wells and storage tanks are secured in a fenced enclosure. Both wells were drilled in 1995 to a depth of 75 feet with a 50 foot cement seal and a combined yield of 135 gpm. The wells have sample taps, meters, and are more than 18 inches above finished grade. The park is located on BLM land, which limits the residency time to five months per year. The only permanent residents are the park managers. The system has several service connections, the RV park, 160 vacation mobile homes, and serves a transient population of more than 1,000 people per month.

#### Riverland Resort

This water system is classified as a transient non-community water system. The system serves 60 mobile home sites, 85 RV sites, and a transient population. The system consists of a single vertical well, five pressure tanks, and two booster pumps. The booster pumps are used alternatively. The active well and tanks are located in a fenced enclosure. Well 1 was drilled in 1977 to a finished depth of 55 feet. The well is surfaced sealed and has one foot sanitary seal. Well 2 was drilled in 2010 to a finished depth of 135 feet. The well is surfaced sealed and has a 55 foot cement sanitary seal. The well is not in use at this time due to an elevated arsenic level. The park is located on BLM land, which limits the residency time to five months per year. The only permanent residents are the park managers.

#### River Lodge Resort

This water system is classified as a transient non-community water system. The system consists of a single vertical well and a storage tank. The well pumps directly to the storage tank next to a residence. The storage tank gravity feeds the distribution system from a higher elevation. The residence is fed by a booster pump and an 80 gallon bladder tank. The operator chlorinates the water with an automatic chlorinator at the well head. The well was drilled in 1995 to a depth of 82 feet with a 50 foot cement seal and a yield of 150 gpm. The well has a sample tap, meter, and is more than 18 inches above finished grade. The system serves 11 mobile home sites and 300 RV sites with a transient population of more than 1,000 per month. The facility has 12 employees.

#### Sunshine Resort

This water system is classified as a transient non-community water system. The system consists of two vertical wells, six pressure/bladder tanks, and two automatic chlorinators. The bladder tanks provide both storage and pressure to the system. The wells and tanks are secured in a locked enclosure. Both wells were drilled in 1995 to a depth of 95 feet with a 50 foot cement seal and a yield of 200 gpm. New meters are to be installed. The wells have sample taps and are more than 18 inches above finished grade. The system serves 36 mobile home sites and 28 RV spaces. The park is located on BLM land, which limits the residency time to five months per year. The only permanent residents are the park managers.

### Windmill Resort

This water system is classified as a transient non-community water system. The system serves Windmill Resort Phases I-III. The resort is located on BLM land. BLM limits residency time to a maximum of five months per year. The only permanent residents are the caretakers. The water source of the system is the Colorado River. A submersible pump at the intake pumps water to the filtration system through a two-inch steel line. Intake water is filtered through four pressure high rate sand filters.

## **C. Sewer**

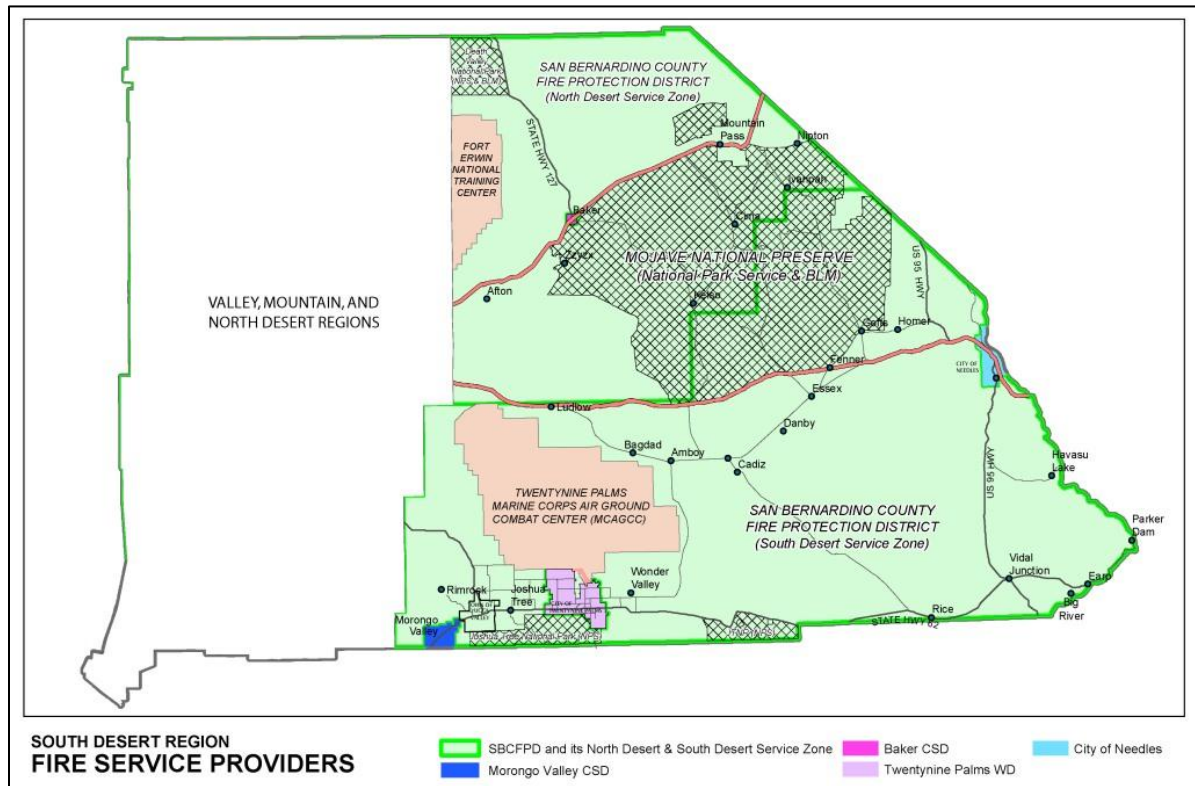
Currently, all areas identified in this report rely on septic tanks and subsurface disposal systems to treat and dispose of wastewater.

## **D. Fire and Emergency Response**

The communities identified in this report are protected from residential fire and provided emergency medical aid by the San Bernardino County Fire Protection District (SBCFPD) which overlays most of the South Desert Region, with the exception of the areas that are currently served by an independent fire service provider [Morongo Valley Community Services District, Twentynine Palms Water District, Baker Community Services District (contract with SBCFPD), and City of Needles (contract with SBCFPD)] and the areas within military installations.

Wildland fires are under the jurisdiction of the National Park Service and the Bureau of Land Management. SBCFPD and its North Desert and South Desert Service Zones have automatic and/or mutual aid agreements with these agencies. SBCFPD provides a full range of first-responder emergency medical services from basic first aid through paramedic (including ambulance service in some areas).

Below is a map illustrating the fire service providers in the South Desert region and the general location of the communities identified in this report, a copy of which is included as part of Attachment #1.



## Interstate 15 Area

The primary function of Station 53 is to provide service along the I-15 transportation corridor. Construction of the current station was funded by the County General Fund for \$3.2 million in 2006 (opened in 2008) with placement in Baker. Prior to 2008, the former facility received its annual funding from the former County Service Area 38 and the County General Fund. Since 2008, SBCFPD and the County General Fund provide funding for the station. SBCFPD provides the following description of Station 53:

### Station 53 (Baker) – 72734 Baker Blvd, Baker

*Station 53 is located in the community of Baker, CA. The fire station is visible from the I-15 freeway on the northeastern end of the town. Daily staffing consists of two personnel: a full-time Captain and one Limited Term firefighter. The fire apparatus are: one ICS Type 1 structure engine (E53), one ICS Type 4 Brush Patrol unit with 4-wheel drive (BP53), and one 4 wheel drive utility vehicle (UT53).*

*This is a key station supporting the vast and heavily traveled I-15 corridor between Afton Canyon and the Nevada state line. Station 53 crews also respond to a large portion of the Mojave Preserve south of Baker. Off road enthusiasts in the Dumont Dunes area north of Baker will also receive assistance from this station when needed.*

The closest active fire stations beyond the Baker community are Newberry Springs about 45 miles to the southwest off Interstate 15 and response units from Searchlight, Nevada Volunteer Fire Department over 71 miles to the east from Interstate 15. This signals the importance of Station 53 as the primary fire protection provider for about 80 linear miles along the I-15 transportation corridor. The following is taken from the SBCFPD website for Station 52:

*Station 52 (Harvard) - 39059 Kathy Ln, Newberry Springs*

*Daily staffing consists of 2 personnel: a full-time Captain, and a limited term "LT" firefighter. They are augmented as needed by paid-call firefighters who live in the local area. The fire apparatus here are: one "Type 1" structure engine (E52) and one "Type 4" all-wheel drive Brush Patrol (BP52). The on-duty crew responds the most appropriate apparatus to the incident.*

*This is a key station supporting the heavily traveled I-15 corridor between Barstow and Baker. Station 52 crews also respond to a large portion of the I-40 freeway including the Ludlow area. Through automatic and mutual aid agreements, they assist adjacent fire departments such as Daggett, Newberry Springs, Yermo, Barstow city, and the Barstow Marine Corps Logistics Base.*

#### **Interstate 40 Area**

The areas of Ludlow, Bagdad, and Amboy identified in this report are many miles from the nearest fire station. The nearest fire station to Ludlow is from SBCFPD Station 52 in Harvard (see station description above).

The areas of Cadiz easterly to Homer vary in distance to the nearest fire stations, with Cadiz being the farthest. SBCFPD stations 31 (Needles) and 18 (Havasus Lake) are the nearest fire stations and most likely to respond or cover for units from the responding station. The following information has been provided by SBCFPD:

*Station 31 (Needles) – 633 Front Street, Needles*

*The administrative functions for fire protection both in Needles and the surrounding South Desert Service Zone are conducted from offices located in Yucca Valley. Apparatus include two Type 1 Engines, one Brush Patrol, one Water Tender and one boat. Daily staffing includes one paid Captain and three limited-term Firefighters, augmented by paid-call firefighters living in the community.*

*Station 18 (Havasus Landing) – 148808 Havasus Lake Rd., Havasus Lake*

*Apparatus include one Type 1 Engine, one Brush Patrol, two ambulances, and one boat (also has patient transport capability). The station is staffed by paid-call firefighters living in the community.*

## Highway 62 Area

The area of Rimrock is fortunate to be close to three SBCFPD fire stations. SBCFPD stations 19, 39, and 42 are most likely to respond or cover for units from the responding station. The following is taken from the SBCFPD website:

Station 19 (Homestead Valley/Landers) - 55481 Jessie Rd, Landers

*Fire Station 19 houses one Type I Engine Company, one Brush Engine, and one Water Tender. A crew of nine paid-call firefighters from the local community staffs this fire station. Units from Station 19 assist Johnson Valley and the Yucca Mesa area as well as responding to calls along Highway 247.*

Station 38 (Pioneertown) - 5380 Mountain View Ln, Pioneertown

*Fire Station 38 is home to a one Type I Engine Company and is located in historic Pioneertown, just a few miles from Yucca Valley. The fire station is staffed by paid-call firefighters living in the local area.*

Station 42 (Yucca Valley) – 58612 Aberdeen, Yucca Valley

*This station is home to twelve career firefighters (3 Captain, 3 Engineers, 3 Firefighter Paramedics and 3 LT firefighters) working a traditional 56-hour work shift. The station houses one Type I Engine Company, one Water Tender, and one modular Ambulance and two reserve engines. This station serves the Yucca Mesa area north of the town proper and responds to incidents in Landers, Johnson Valley, Pioneertown, and Joshua Tree. Units from Station 42 assist the California Department of Forestry and Fire Protection on all SRA lands west of Highway 247.*

SBCFPD stations 17 and 55 are most likely to respond to the areas closer to the Colorado River (Rice, Vidal, Earp, and Parker Dam). The following is taken from the SBCFPD website or provided by SBCFPD:

Station 55 (Black Meadow Landing)

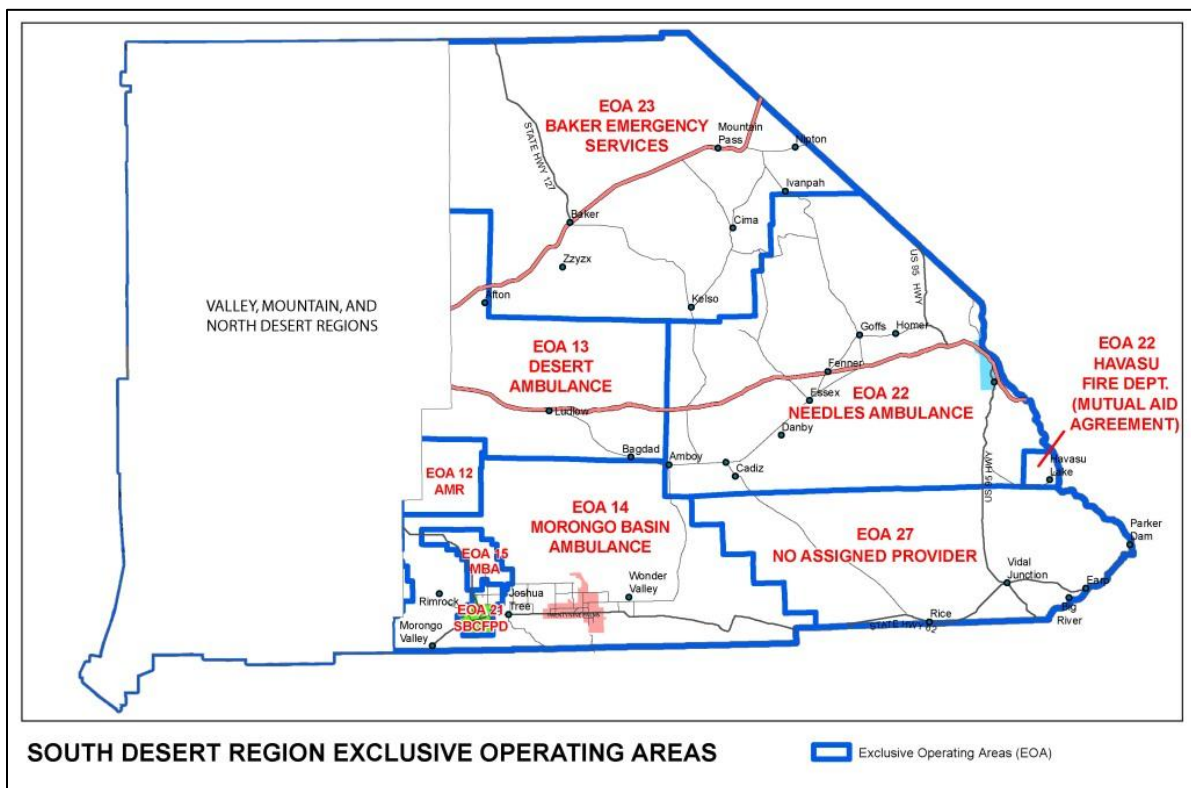
*Fire Station 55 houses a single Type I engine company. According to the Chief of SBCFPD's South Desert Service Zone, there is a single paid-call firefighter ("PCF") at Station 55. This station is rather unique due to its remote location and the PCF is also the operator of the private resort that is located there on leased public land. While the station primarily services the resort itself, it also serves other areas along the Colorado River corridor and backs up other stations on occasion. It is not known by LAFCO staff at this time how the additional fire personnel needs are fulfilled at this station for fire response, or emergency medical. Apparatus includes one Brush Patrol. Additional fire personnel support needs are fulfilled from our other area stations including Station 17 in Big River and Station 18 in Havasu Landing.*

Station 17 (Big River)

*This station houses a single Type I engine, one Type IV engine, and one water tender. This station serves as the Battalion Headquarter for the River area. Volunteers living or working in the community staff the station.*

## E. Ambulance

Since 1988, the County of San Bernardino Board of Supervisors has authorized the implementation of ambulance provider Exclusive Operating Areas (EOAs) as authorized by Sections 1797 et seq. of the Health and Safety Code. The local emergency medical services agency for San Bernardino County to define EOAs is the joint powers agency known as the Inland Counties Emergency Medical Agency, or "ICEMA". Below is a map illustrating the EOAs in the South Desert region and the general location of the communities identified in this report, a copy of which is included as part of Attachment #1.



Along Interstate 15, ambulance and paramedic services are provided by Baker Emergency Medical Services, Inc. ("Baker EMS"). Baker EMS is a private company based out of Baker and provides service within EOA 23.

For the communities of Ludlow, Amboy, and Bagdad proximate to Interstate 40, Desert Ambulance based out of Barstow provides services within EOA 13. Air ambulance service, if necessary to airlift a patient to a hospital, is provided in the area by Desert

Ambulance's air division. The areas of Cadiz easterly to Homer are within the EOA assigned to Needles Ambulance. In 1997, Baker EMS purchased Needles Ambulance and assumed responsibility for EOA 22. Baker EMS's Needles Ambulance Service has a total of three ambulance units that are stationed in Needles, CA.

Proximate to Highway 62, medical response and ambulance services in Rimrock are provided by the Morongo Basin Ambulance Association ("MBA"), a community-based, non-profit, non-tax supported association within EOA 14. The MBA has a total of eight ambulance units, five units of which are manned full time in the Morongo Basin area and an additional three ambulances can be manned if needed. Air ambulance service, if necessary to airlift a patient to a hospital, is provided in the area by Mercy Air Service.

East of Twentynine Palms and Wonder Valley along Highway 62 are the areas of Rice, Vidal Junction, Earp, and Parker Dam. There is no assigned provider within this EOA. However, services are typically provided by River Medical, a division of American Medical Response (AMR) from their facilities in Parker, AZ.

## **F. Law Enforcement**

Law enforcement within all communities identified in this report is provided by the San Bernardino County Sheriff's Department.

## **G. Electricity**

Southern California Edison provides electric power to majority of the South Desert region, including the areas identified in this report. The City of Needles provides electricity within its boundaries and portions of its sphere of influence.

## **H. Streetlighting**

Southern California Edison provides streetlighting service to majority of the South Desert Region, including the areas identified in this report. Streetlights within the areas identified in this report are mostly safety lights (normally located at major intersections or above signal lights) that are billed to CALTRANS or the County Public Works - Transportation Division. Any other streetlights are privately-owned (i.e. individual owner, non-profit organizations, HOA's, etc).

## **I. Park & Recreation**

The natural setting, which includes open space, recreational areas and natural resources, is the contributing factor to the rural desert character. The area's natural features including lakes, rivers, vegetation, wildlife, topography, rock formations, etc. are not only regional assets by national assets that are highly valued by residents of these areas and by visitors worldwide.

The Mojave National Preserve provides additional opportunities for outdoor recreation, such as biking, hiking, fishing, and camping. Within the Preserve is the Providence Mountains State Recreation Area which includes Mitchell Caverns.

## **J. Solid Waste**

Waste Management of the Desert (an affiliate of Burrtec), which provides curbside garbage and recycling collection service to the Morongo Valley and Yucca Valley communities, also serves the Rimrock area. The cost for residential service is \$93.12 every four months. The nearest landfill that Burrtec operates and manages is located in Landers. This service is not mandated for residents within the Rimrock area. Those choosing not to pay for private trash collection by Burrtec can opt to take their trash to the Trail's End Transfer Station by using the land use passes that are a part of the County's Refuse Disposal Land Use Fee.

The County levies a Refuse Disposal Land Use Fee to property tax bills for developed residential and commercial properties per the San Bernardino County Code.<sup>1</sup> Parcels of property within the Rimrock area are subject to the use fee in accordance with the County's Schedule of Fees for solid waste delivered to the transfer station.<sup>2</sup>

The other areas within this report are not within an assigned County Franchise Area; therefore, these areas do not have an assigned solid waste collector and are not subject to County's Refuse Disposal Land Use Fee.

## **K. Roads**

Road service within these communities is provided by either Caltrans (for all State and Interstate highways) or the County's Public Works - Transportation Division (for all the County maintained roads). Other means of road service could be through the formation of county service areas or creation of zones to county service areas. None of these communities currently have or use county service areas for any type of localized road service.

KRM/SM/MT

Attachments:

1. [LAFCO Defined Communities Map](#)
2. [South Desert Region Fire Service Providers Map](#)
3. [Ambulance Transport Service Exclusive Operating Areas Map](#)

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<sup>1</sup> San Bernardino County Code. Title 1 (Government and Administration), Division 4 (Purchasing, Revenue, and Taxation), Chapter 4 (Refuse Disposal Land Use Fees).

<sup>2</sup> San Bernardino County Code. Title 1 (Government and Administration), Division 6 (County Fees), Chapter 2 (Schedule of Fees).